

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An information processing apparatus comprising:

grouping means for organizing delivered contents into groups each constituted by the contents which are given the same group identification (ID) for having degrees of similarity higher than a predetermined value regarding a grouping item including at least one attribute item representative of a content attribute;

calculating means for calculating frequency of uses of the contents with respect to each of the group IDs;

generating means for generating user preference information indicating preferences of a user based on the use frequency calculated by said calculating means, said generating means generating user preference information based on a normalized use frequency for each group, said normalized use frequency normalized by dividing each based on use frequency frequencies of each all contents in each respective group by a number of all the contents in the respective group delivered during a time period corresponding to a use history; and

recommending means for giving content recommendations based on said user preference information generated by said generating means.

Claim 2 (Original): The information processing apparatus according to claim 1, wherein the grouping attribute constituted by an attribute item indicating a broadcast time slot and by at least one other attribute item is established for said information processing apparatus; and wherein said grouping means organizes said delivered contents into groups by the established grouping attribute.

Claim 3 (Original): The information processing apparatus according to claim 1, wherein the grouping item constituted by at least an attribute item indicating a broadcast time slot and the grouping item formed by other attribute items are established for said information processing apparatus; and wherein said grouping means organizes said delivered contents into groups by each of the established grouping items.

Claim 4 (Original): The information processing apparatus according to claim 1, wherein said grouping means morphologically analyzes constituent items making up said attribute item of said contents, and determines degrees of similarity between constituent items making up said grouping item based on results of the analysis.

Claim 5 (Original): The information processing apparatus according to claim 1, wherein said generating means does not utilize the use frequency of the group constituted by the contents failing to meet a predetermined condition when generating said user preference information.

Claim 6 (Original): The information processing apparatus according to claim 1, wherein said recommending means comprises:

determining means for determining whether or not said use frequency calculated by said calculating means is higher than a predetermined set value; and

setting means for setting a staple flag indicating that the recommended contents have been viewed frequently to said content recommendation information if said use frequency is found higher than said predetermined set value by said determining means.

Claim 7 (Original): The information processing apparatus according to claim 1, wherein said generating means comprises extracting means for acquiring metadata about the contents constituting the groups of which said use frequency calculated by said calculating means is higher than a predetermined set value, said extracting means further extracting vectors representing an amount of characteristics of said metadata; and wherein said generating means generates said user preference information based on said vectors extracted by said extracting means.

Claim 8 (Original): The information processing apparatus according to claim 7, wherein said generating means comprises staple determining means for determining whether or not the contents constituting the groups of which said use frequency is found higher than said predetermined set value correspond to said content recommendation information to which is set a staple flag indicating that the recommended contents have been viewed frequently; and wherein, if said staple determining means determines that said contents do not correspond to said content recommendation information carrying the set staple flag, then said extracting means acquires the metadata about said contents and extracts vectors representing an amount of characteristics of said metadata.

Claim 9 (Original): The information processing apparatus according to claim 7, wherein said user preference information is constituted by a plurality of attributes and by values representing degrees of importance of said attributes.

Claim 10 (Original): The information processing apparatus according to claim 7, wherein said generating means comprises familiarity setting means for setting degrees of familiarity with said contents based on the use frequency calculated by said calculating

means; and wherein said generating means assigns weights to degrees of importance of said user preference information based on said degrees of familiarity.

Claim 11 (Original): The information processing apparatus according to claim 7, wherein said generating means comprises:

searching means for searching for contents of which said use frequency is lower than a predetermined value on the basis of a history of uses of said contents; and special preference information generating means for generating special preference information based on metadata about the contents retrieved by said searching means.

Claim 12 (Original): The information processing apparatus according to claim 11, further comprising:

first extracting means for extracting vectors representing an amount of characteristics of either said user preference information or said special preference information;

second extracting means for acquiring metadata about the contents broadcast in a predetermined set time slot, and extracting vectors representing an amount of characteristics of said meta; and

calculating means for calculating degrees of similarity between the vectors extracted by said first extracting means and those extracted by said second extracting means;

wherein said recommending means selects a predetermined set number of the vectors extracted by said second extracting means, said vectors being selected in descending order of said degrees of similarity, said recommending means further giving content recommendations based on the metadata about the selected vectors.

Claim 13 (Currently Amended): An information processing method comprising:

organizing delivered contents into groups each constituted by the contents which are given the same group identification (ID) for having degrees of similarity higher than a predetermined value regarding a grouping item including at least one attribute item representative of a content attribute;

calculating frequency of uses of the contents with respect to each of the group IDs;

generating user preference information indicating preferences of a user based on the use frequency calculated in said calculating, said generating including generating user preference information based on a normalized use frequency for each group, said normalized use frequency normalized by dividing each based on use frequency frequencies of each all contents in each respective group by a number of all the contents in the respective group delivered during a time period corresponding to a use history; and

giving content recommendations based on said user preference information generated in said generating.

Claim 14 (Currently Amended): A computer readable recording medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method comprising:

organizing delivered contents into groups each constituted by the contents which are given the same group identification (ID) for having degrees of similarity higher than a predetermined value regarding a grouping item including at least one attribute item representative of a content attribute;

calculating frequency of uses of the contents with respect to each of the group IDs;

generating user preference information indicating preferences of a user based on the use frequency calculated in said calculating, said generating including generating user preference information based on a normalized use frequency for each group, said normalized

use frequency normalized by dividing each based on use frequency frequencies of each all contents in each respective group by a number of all the contents in the respective group delivered during a time period corresponding to a use history; and

giving content recommendations based on said user preference information generated in said generating.

Claim 15 (Canceled).

Claim 16 (Previously Presented): The information processing apparatus according to claim 1, wherein said recommending means recommends content for which the normalized use frequency exceeds a preference threshold.

Claim 17 (Currently Amended): An information processing apparatus comprising:  
a grouping unit configured to organize delivered contents into groups each constituted by the contents which are given the same group identification (ID) for having degrees of similarity higher than a predetermined value regarding a grouping item including at least one attribute item representative of a content attribute;

a calculating unit configured to calculate frequency of uses of the contents with respect to each of the group IDs;

a preference generating unit configured to generate user preference information indicating preferences of a user based on the use frequency calculated by said calculating unit, said preference generating unit configured to generate user preference information based on a normalized use frequency for each group, said normalized use frequency normalized by dividing each based on use frequency frequencies of each all contents in each respective

group by a number of all the contents in the respective group delivered during a time period corresponding to a use history; and

a recommending unit configured to give content recommendations based on said user preference information generated by said preference generating unit.